



U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

DEC 24 1987

REPLY TO
ATTN OF: HW-112

12-30
1 cy to WINO
w/attach. (1)
1 cy to EGRG
w/attach. (4)

Thomas F. Gesell, Deputy Assistant
Manager for Nuclear Programs
U.S. Department of Energy
Idaho Operations Office
785 DOE Place
Idaho Falls, Idaho 83402

Re: INEL Initial Assessment Ranking Update, Update on CPP-55 Closure Plan
Review, and CPP-77 Summary Assessment Review.

We have been informed that the priority action levels we proposed in our October 20, 1987 letter is restrictive and may result in your inability to devote sufficient resources to undertake ground water investigations at a minimum of four (4) high priority Land Disposal Units (LDU's). You have proposed that by reducing the action level to 10.4, work can begin on CPP-33 and CPP-34 which will be funded out of the WINCO budget. By reducing the score from our proposed value of 14.0 to 10.4 a total of 15 LDU's would be characterized as high priority. Four of these are already under investigation. Therefore, 11 LDU's would be considered high priority for this recharacterization, leaving 12 LDU's as low priority. As you will be selecting LDU's from the top half of the list, we can accept your proposal to reduce the action level to 10.4. We therefore amend our previous letter dated October 20, 1987 to accept those LDU's with prioritization scores equal to or greater than 10.4.

During the conference call of December 3, 1987 concern was expressed over our consultant's review of the CPP-55 closure plan. One concern was that you did not receive a complete comment package. We have enclosed another copy of our consultant's comments for your review. The major concern, however, was expressed over an apparent discrepancy between USGS's comments and those of our consultant. We have reviewed both reports and do not agree that there is a discrepancy. USGS's comments concerning ground water sampling are valid. The use of one well to evaluate ground water is difficult and may be impossible. However, soil sampling is itself complex and unless attention is paid to sampling those lithologic layers most probable to retard constituent migration, the results of soil column sampling may be misleading. One reason for ground water sampling is that it is often the media where contaminant migration is predictable. To achieve clean closure at a LDU, it must be documented that there have been no releases of hazardous constituents to ground water. If only elemental mercury was present, the proof necessary could be as simple as demonstrating that the mercury was immobile and confined within the proposed excavated area. Unfortunately, hazardous constituents other than mercury was disposed of at this location. We would agree with

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USGS's comment that ground water monitoring should start at the uppermost saturated zone and work down. A single well should be advanced to explore for a perched water table. If a perched water zone is encountered underlying the unit, it will need to be characterized as to water quality and flow conditions. If there is little lateral movement of ground water in the perched zone, and it can be demonstrated that the characteristics of the regional aquifer make it impossible to use it for detection monitoring, then it is possible to utilize limited monitoring well data to determine if clean closure can be achieved by excavating the contaminated soil. Please note, however, that such a demonstration is predicated on a large number of assumptions.

Other comments made by USGS are also valid and should be incorporated with the exception of a possible misunderstanding concerning the use of EP-toxicity analysis. Although EP-toxicity determinations are used to characterize if a waste is hazardous, total concentration analysis is used for closure analysis. Establishing background concentrations for hazardous constituents is an important component of demonstrating clean closure. USGS's comments on observed background mercury concentrations is noteworthy. However, unless the material underlying the CPP-55 location consists of rhyolitic welded ash-flow tuff, we do not see what value the 147 ppm concentration of mercury detected in such a sample has to the project at hand.

The summary assessment for CPP-77 characterizes the solid waste management unit, which is believed to have been constructed in the late 1970's, as a septic tank and seepage pit which is used for treating sanitary waste generated by the Maintenance Fabrication Shop. The operations conducted in the Maintenance Fabrication Shop included welding, pipe fitting, sheet metal work and some painting. Although it is proposed in the report that all liquids used in these operations are collected and deposited in the satellite accumulation area, this activity would be expected to be of recent origin. Further, it is unclear in the report what plumbing fixtures are connected to the septic system and their locations. Based on the information provided we are unable to agree that this unit should be deleted from the list. Additional information like the location of sinks and nearby processes, chemical inventory records, a discussion on the fate of liquids prior to establishing the satellite area is required to support the proposal. If gathering this information is difficult, it may be advisable to collect a sludge sample from the septic tank for hazardous constituent analysis.

Please contact me at FTS 399-2782 or Wayne Pierre at 399-7261 of my staff if you wish to discuss these matters further.

Sincerely,

for George C. Feigner
Kenneth D. Feigner, Chief
Waste Management Branch

Enclosures

cc: Cheryl Koshuta, IDHW(w/enc1.)
Greg Weatherby, IDHW

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Initial gf Date 6/22/93